



KERALA AGRICULTURAL UNIVERSITY
B. Tech. (Agrl. Engg.) 2021 Admission
V Semester Final Examination – January 2024

Fape.3104

Agricultural Structures and Environmental Control (2+1)

Marks: 50
Time: 2 hours

- I Fill in the blanks (10x1=10)**
1. In the loose housing barn, the floor space for loafing and feeding required is aroundsq. metre per cow.
 2. Stack to stack distance in 500 tonne green warehouse should be metre.
 3. The floor space depends on andof animals.
 4. Width of manger is generally
 5. The voltage applied to the electric fence varies between and volts under different condition.
- State True or False**
6. Septic tank should be within 30 metre from any source of water supply.
 7. Hermetic sealed units are more suited for cold storage.
 8. Cage houses are built in warm regions where birds need no protection from cold winds.
 9. Residential buildings should be located near the cattle shed.
 10. The face out type barn is preferred for milch animals.
- II Write short notes on ANY FIVE of the following (5x2=10)**
1. What should be the orientation of residential building in regard to sanitation?
 2. Write down the salient features of a stanchion barn.
 3. What are the advantages of bulk storage over bag storage?
 4. What is bore-hole latrine?
 5. What are different types of poultry houses?
 6. Define Homeostatis.
 7. Enumerate the requirement of a good storage structure.
- III Answer ANY FIVE of the following (5x4=20)**
1. Briefly describe the different components of dairy barn.
 2. Write about head to head and tail to tail system.
 3. Write about different types of fencing for animal sheds
 4. Explain physiological reaction of livestock to environmental factors.
 5. Explain the deep litter poultry housing.
 6. What are the criteria for site selection of farmstead?
 7. What is cover and plinth storage?
- IV Write an essay on ANY ONE of the following (1x10=10)**
1. What do you understand by grain pressure theories? Define plane of rupture. What are the criteria for shallow and deep bins determination?
 2. Classify dairy barns and write the features of loose housing dairy barns.
